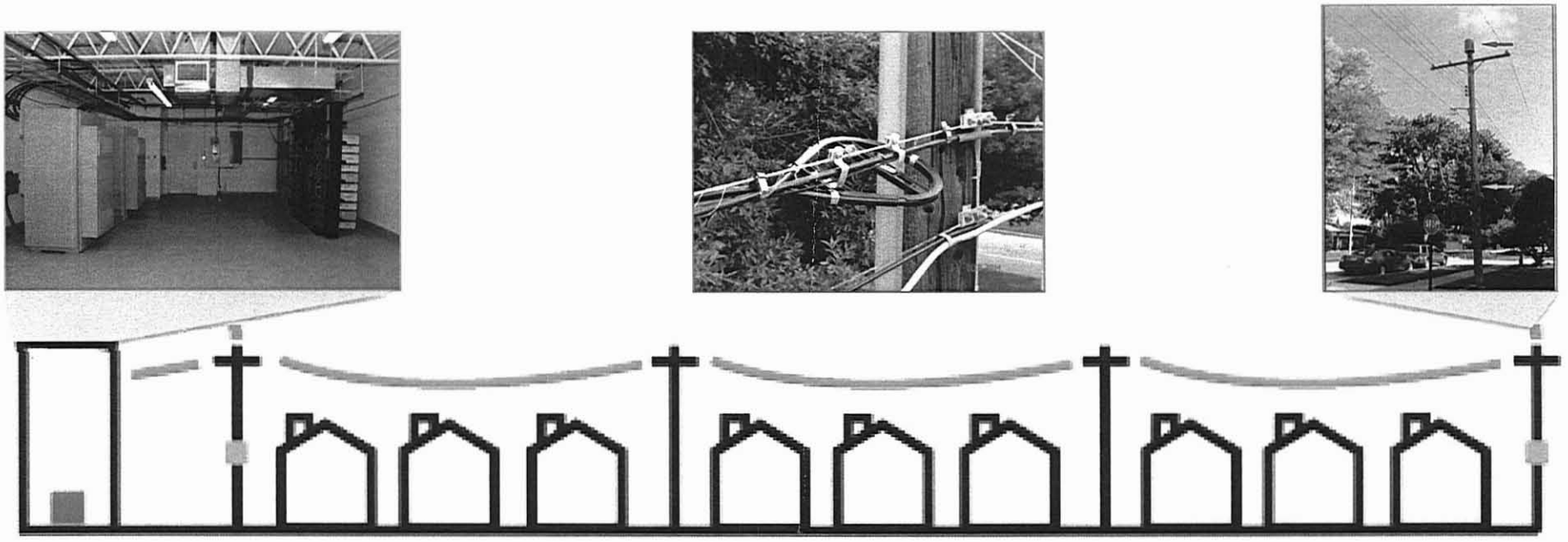
Outdoor Distributed Network Topology



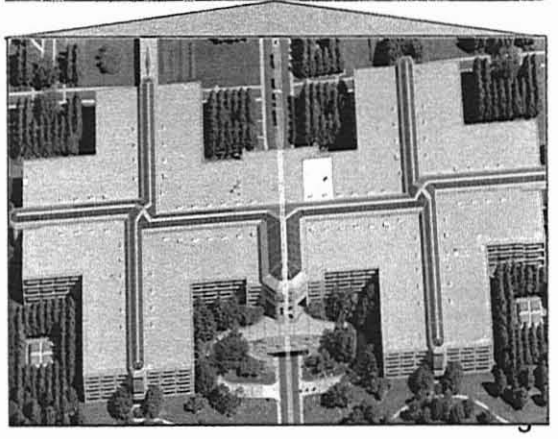
Hub Facility
- Carrier Base Station Equipment
- RF Signal Conditioners & Combiners + RF/Optical Converters
- Digital Base Band Units
- Back-up Power Supplies

Fiber Network
- High Count Single Mode Fiber Optic Cabling
- Embedded Backhaul Capacity

Node Sites
- Antenna: Multiband
- Node Equipment: RF/Optical Converters + Radio Amplifiers or Remote Radio Units
- Optional Battery Backup

Benefits of Distributed Networks to Broadband and Wireless Deployment

Coverage	• An architecture that provides coverage in areas that cannot be effectively addressed with traditional "macro" cell sites
Capacity	• Better management of available radio resources given the ability to closely align capacity to actual market requirements
Spectrum	• **More efficient use of available frequency spectrum by having an increased number of low power transmission points**
Interference	• **Reductions in interference given lower radiation centers and lower output power, enabling greater data transmission rates**
Backhaul	• Better utilization of transmission infrastructure due to aggregation from central hub location
Scalability	• A network that can be scaled to meet future capacity requirements by adding carrier base station equipment at Hub Site
Adaptability	• A network architecture which provides the ability to quickly respond to market dynamics, changes in equipment architecture and new technologies



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